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MEDICINE AND SURGERY.

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THE AMERICAN PRACTITIONER.

OCTOBER, 1871.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—RUSKIN.

Original Communications.

PUERPERAL FEVER.

BY A. P. MERRILL, M. D.

The fatality of puerperal fever, which in many parts of the northern states appears to be scarcely less proportionally than that which attends upon yellow fever in the South, invites persevering inquiry into the pathology and treatment of the disease, and the more because of the variety and discordancy of prevailing opinions. The devotion of a life somewhat prolonged to the investigation and treatment principally of periodic diseases, often of the gravest form and character, has enabled me abundantly to verify the fact that the mysterious principle, periodicity in disease, so universally prevalent, besides its existence in much obscurity, may remain latent in the system for an indefinite period of time, always ready to be developed into activity upon sufficient provocation. Proof of this is found in the oft-repeated observation that persons who have resided in malarial districts often carry with them upon their removal to a more healthy locality

enough of this principle to subject them to an attack of periodic fever, upon the application of some exciting cause, months and even years after such change of residence. The liability of English people returning home from southern colonies, more than others among whom they live, to attacks of periodic disease has long been observed. The same is true also in regard to persons changing their residences from South to North in this country. Accidents and exposures producing a moderate shock of the nervous system have been sufficient to elicit the periodic movement in these cases when no such tendency had been observed to exist, and while others similarly exposed have escaped.

Now, to apply this doctrine to the puerperal condition, observation proves to us that during the whole period of pregnancy, while extraordinary powers are exercised to the accomplishment of one great purpose, often holding morbid tendencies in abeyance, there may be no sign of pathologic periodicity in the system, and yet its latent existence become evident from the readiness of its development as the effect of parturition. Surely if wounds and concussions, and even so slight a cause as change of temperature, may so disturb nervous function as to develop periodic disease long after the principle of periodicity has been imbibed, we might reasonably expect a similar result from the violence of child-birth. Accordingly we do find that this event is often followed by well-marked paroxysms of fever at a period too early to allow for an original incubation or to be attributed to the influence of lactation. The susceptibility of the uterus at such a time determines the localization of the disease, and metritis becomes the distinctive local lesion of the fever. This appears to be the more remarkable when we consider that idiopathic inflammation of the uterus, even after parturition, is a rare disease. Hyperæmia, congestion, hypertrophy, and nervous irritability of this organ are common; but inflammation, except as a lesion of fever, is unusual and exceptional.

A difficult complication in puerperal fever is the existence of peritoneal inflammation as its frequent but not invariable concomitant. This is also uncommon as an idiopathic disease, but it must not be deemed extraordinary that a vascular and sensitive serous membrane so closely investing the uterus and contiguous viscera should from sympathy partake of the morbid excitement of that organ. It is the more likely to do this, perhaps, because of the great distension it has suffered during the period of gestation, and its sudden relaxation following parturition. Nor should it be a matter of surprise that the increased constitutional disturbance caused by a complication so serious as peritoneal inflammation often gives rise to the opinion that this is the primary and distinctive lesion of puerperal fever. Be this as it may, the fact is ever patent that the uterus is always the organ first to suffer in this disease, than which there is no febrile lesion more serious and more dangerous to life. Under strong epidemic influence, the first paroxysm is sometimes, and the second often, fatal. Remedial measures must therefore be prompt, decided, and skillfully applied, and without regard to the temporizing policy of expectant medicine.

As in all other diseases which have ever proved extensively fatal, it has been contended that puerperal fever is propagated by contagion, and by some that contagion is the sole cause of the disease. The profession has been entertained by earnest and by bitter and vituperative discussions of the subject, contending even for the extreme view, applicable to no other disease, that the infection adheres to the person, and especially to the hands, of the accoucheur, in spite of ventilations, ablutions, and disinfections. It is said of small-pox, which is generally conceded to be the most contagious of all diseases, and believed by some to be the only disease which is uniformly so, that it has never been known to be conveyed from one patient to another by attending physicians. Without any extraordinary precaution, the

contagious matter which may adhere to the person and clothing is supposed to be dissipated in the atmosphere. Proof has been given of the preservation of small-pox contagion in textile fabrics, but it has always been among such materials packed up and secured from ventilation. Upon inquiry at the great paper-mills, where imported rags in large quantities are used, I have not been able to hear of an instance of the communication of small-pox by them; and the explanation, several times given, has been that the rags were rendered innocuous by a process of ventilation and drying, but without the application of the great disinfectant—artificial heat.

This question of contagion must, as in other diseases supposed to be propagated by this agency, be settled by observation and experience. If it can be shown that puerperal fever often occurs without the possibility of contagion, and without a suspicion of a communication of the disease to other puerperal subjects, it affords ground for the presumption that contagion has no agency in its production. Sporadic cases of this character are to be met with everywhere, and especially in cities and districts of country subject to malarial influences, and they excite no apprehension of contagion. It is only when the disease appears as an epidemic that this apprehension prevails, as it does in regard to every other epidemic disease; and men are slow to believe, while great numbers are suffering under similar circumstances, that the disease may be the product of a common cause independent of contagion. In my own judgment it is just as feasible to adduce proofs of the contagious character of common intermittents as of puerperal fever. Under epidemic influence one is not more likely than the other to attack all susceptible subjects, irrespective of intercourse, or the agency of physicians and nurses in conveying contagion.

If my views on the pathology of puerperal fever be correct, it necessarily follows that antiperiodics must be principally relied upon as both preventive and remedial. During the

latter months of pregnancy quinine may be given daily to eradicate the principle of periodicity, whether latent or obscurely developed. If judiciously administered it will nearly always prove successful, but in general large and sedative doses are to be avoided as tending to produce uterine contraction and premature delivery; but when the proper period for child-birth arrives this quality of sedative doses may be taken advantage of to facilitate labor, and to guard the woman against the dangerous development of fever. Nothing can be more appropriate than the production in this case of a condition of quininism which relaxes rigidity while it increases expulsive contraction. Upon the occurrence of *post-partum* fever, however, advantage must be taken of the first sign of remission to administer quinine in full doses to prevent a return of the paroxysm, which in times of an epidemic prevalence of puerperal fever not unfrequently proves fatal. There may be excessive uterine discharge as a consequence of the contrastimulation and the specific influence of the remedy over uterine function, but it is better to incur the risk of this than to forego the important advantage of effective antiperiodic treatment. The bebeerine may also be given whenever the uterine discharges render restraining treatment necessary, and in this there may be also some antiperiodic power to make it an adjuvant to the quinine.

The abortive treatment by chloroform internally is not less important and effective in this than in other forms of periodic fever. Upon this alone can reliance be placed to obviate the nervous derangements upon which the chill depends; but it is important that it be given in the inception of the chill, and in such dose as will produce gentle and healthful sleep. Few things are more difficult, however, than the enforcement of early and abortive treatment in fatal epidemic diseases, or even the preventive measures which might prove successful. I have often thought the puerperal-fever epidemic more liable to this difficulty than other diseases. During pregnancy

women are slow to believe in the necessity of preventive measures, and upon the invasion of the chill after parturition it is apt to be attributed to some temporary nervous disturbance. Should the patient survive the first paroxysm, neither she nor her friends are likely to believe in the danger of its repetition; but this kind of infatuation belongs more or less to every epidemic disease, and is one cause of its mortality.

Opium is highly esteemed as a remedy in peritonitis, and to relieve this complication it has been recommended in puerperal fever; but it often fails to afford the expected benefit, and sometimes, no doubt, it hastens on a fatal termination of the disease. The reason is, I apprehend, that inflammations of the serous membranes, whether they occur as lesions of fever or from other causes, are productive of nervous irritations, which do not prevail to the same extent in the other tissues. For these irritations in the serous membranes opium is a useful and sometimes appears to be an indispensable remedy. In the treatment of pleuritis as a febrile lesion, for example, we find opium to be useful in the very stage of the disease which in gastric fever would preclude its administration. In puerperal fever the close sympathy between the uterus and the stomach gives rise to gastric lesions simulating those of yellow fever, and the resemblance is increased not unfrequently during an epidemic prevalence of the puerperal fever by its culminating in black vomit. In all such cases opium operates unfavorably, and facilitates the fatal issue so common and so dreadful in this class of diseases, involving the disorder of the mucous tissues of the stomach. I am not disposed to deny the efficacy of opium in idiopathic peritonitis, although I have found scruple doses of calomel given with turpentine and without opium, or with opium in moderate doses, to be equally successful; and I know of one remarkable case which was cured by calomel alone, given in very large quantity, the patient being restored to perfect health, and without salivation.

Because of the commonly torpid condition of the bowels during pregnancy, and especially of the large intestines, cathartics are often necessary after confinement, and the more in case of the prevalence of puerperal fever. It is sometimes difficult to dislodge hardened fecal accumulations from the colon, and while they remain the irritations produced are a serious hinderance to successful treatment. It sometimes happens that watery dejections pass the hardened fæces, and deceive the patient into the belief that the bowels are sufficiently active, causing neglect of this important precaution. In this case mercurial cathartics are valuable as tending to the restoration of impaired secretion, and less than most other remedies of this class to prostration of strength by the production of watery stools. These may be alternated by aloes in aperient doses as operating mainly upon the large intestines, and sometimes by turpentine as conducive to healthy action in the mucous tissues, and also to a proper excitation of the kidneys. Were these women subjected to such intestinal treatment in the latter months of pregnancy, there are good reasons for believing it would save them from the evils of albuminous urine, and the convulsions so often its concomitant.

I need not refer in detail to other remedies employed in the treatment of puerperal fever, all which are of small importance compared with the measures, properly timed, for warding off a returning paroxysm of fever, and without which it is certain to come. The disease, it must be borne in mind, is one of periodicity, and, like other fevers of this class, it manifests its violence in the morning paroxysm. The patient may have one, two, or three of these paroxysms in as many successive mornings, with many encouraging symptoms during the remissions, inspiring high hopes of a favorable result, when, for the want of effective antiperiodic treatment, there is an increase in the violence of the exacerbations of fever, and she unexpectedly succumbs. Such is the fate of many

young mothers. Since the revival of the doctrine of debility in fever, contrastimulant measures are seldom used, either before or after confinement. The simile of the overburdened laborer, whose resiliency secures him from oppression when the crushing weight under which he was sinking has been removed, is no longer admissible; but debility is the common watchword, and stimulation the remedy. In no other form of fever is this revival of an ancient error more frequently illustrated, and in none is it more to be deprecated, than in determining the treatment, both preventive and curative, of puerperal fever. The temporary exhaustion of physical strength by a painful and perhaps tedious parturition is too often met by injudicious measures of invigoration; and it is not uncommon that such errors in practice bring upon the woman a painful habit of vertigo and rush of blood to the brain, from which it is difficult to afford relief.

But women of feeble constitutions are met with, and especially women advanced in life, who have borne many children, in whom the principle of vitality seems to be impaired, with a defective nervous energy, who are benefited by measures of invigoration as the period of parturition approaches, and without which, should puerperal fever follow, we may reasonably expect a tendency to an early collapse, reducing the vital power below the standard of health. The diagnosis is sometimes difficult because of the similarity of symptoms presented by conditions of plethora and debility; but the asthenic condition may generally be determined by observing the exhaustion of strength and labored respiration which follow sudden exertion. The sensation of throbbing of the arteries, and especially of the brain, is also a diagnostic symptom indicating debility. Such cases bear and require tonic treatment, preference being given in general to iron and arsenic. We have no vegetable remedy equally reliable, or safer in respect of its immediate effects.

FOREIGN CORRESPONDENCE.

BY MELVIN RHORER, M. D.,

Assistant Demonstrator of Anatomy in the University of Louisville.

The Hospital and School of Vienna.

Not many years since it was quite the exception that American students found their way to Vienna. Almost all who came abroad to study medicine went to Paris. It can not be doubted, however, that during the last ten years French medicine has been steadily declining; and even had not the destruction of Paris put an end to medical teaching there, for some years at least, the other European universities would have drawn off great numbers of foreigners from the French capital. Berlin and Vienna are, I think, destined, for some years to come at least, to be the favorite resorts of American students. Few will stop in London, partly because it is not foreign enough, partly on account of the dearness of living. There are at present sixty Americans attending the courses here. Two years ago there was not one fourth that number. In view then of the increased importance of the Austrian University, I have thought that an account of the medical advantages to be derived here would not prove unacceptable to the readers of the Practitioner, especially to such as may intend coming abroad to prosecute their studies.

I set out with the remark that elementary instruction is entirely out of the question here. Such branches, of course, are taught, but these lectures are only attended by those who are regularly entered for their medical degrees. Independent of the fact that few Americans would care to devote the seven years required for this purpose, our modes of instruction at home, in my judgment, are superior—certainly at least better

adapted to our wants. It is entirely for clinical instruction that students resort here, and I can safely say that nowhere can the advantages in this field be excelled. In London and Paris the student is bewildered with a dozen hospitals and schools. Clinics are held at so nearly the same hour, and at places so far apart, that it is almost impossible to attend more than one or two during the same day. Here everything is centralized in the Imperial Hospital; and if one desires it, he may work away from sunrise to sunset without loss of time. Not having seen in any of our journals a detailed description of this hospital, I venture to give one here, as it is at the same time the medical department of the University of Vienna.

It was founded in 1787 by the Emperor Francis Joseph II., who must have had in view the object for which it was intended—an abode for the sick and a school for learning. It is certainly, except in point of size, no architectural monument to his memory. It covers an area of ten acres or more. It is two and a half stories high, the walls being of brick, rough cast, and windows and doors of the plainest pattern. It is hard to obtain an idea of its immense size, for it is so constructed that at no place can the eye take it in at one glance. Situated in a crowded part of the city, its street front resembling an ordinary façade, it has none of the externals we are accustomed to look for in a hospital. Passing through its arched gateway you enter the large court, containing about three acres, tastefully laid out in shade-trees, flowers, walks, and fountains. It is here that you are first impressed with the magnitude of the building. There are, however, eight other courts connected with this, which can only be separately viewed. At the end of the last court stands the pathological institute, which was erected by Rokitansky in 1859. This is a building of far more pretensions than the rest of the hospital. It contains the dead-house, the lecture-room for chemistry and materia medica, and the various

operating-rooms. To the right of this, on a hill, stands the building for the insane. It was evidently erected in the times when it was considered criminal to lose one's mind. It could easily be mistaken for a prison or fortification. It is a large round tower with narrow windows, and shut off from the rest of the world by a moat. The wards of the hospital are constructed in the simplest manner. Everything is scrupulously clean, but no attempt whatever has been made at embellishment. Their number is one hundred and ten, and they contain twenty-five hundred beds. Besides the wards there are thirty clinical amphitheaters, the apartments for the various officers, and a chapel. There are seemingly no modern conveniences about the hospital. The heating is done by stoves, and the water taken to the wards by the convalescents from the fountains in the courts.

The hospital being a government institution, it has two different staffs, civil and medical. There are twenty-eight civil and fifty-two medical officers. Counting servants and nurses, three hundred and thirty-two persons are employed in the institution. Everybody is paid. The assistant physicians, of whom there are forty-two, receive from one hundred and twenty-five to two hundred dollars per annum. Besides this they are lodged, but not fed. Privilege is allowed them, however, of private practice and teaching. Most of the real instruction of the University is done by these men. The civil director of the hospital gets sixteen hundred dollars.

The diet of the hospital is supplied entirely by contract, and at a price which would astonish a board of governors at home. The contractor issues from his immense kitchen what is ordered by the physician from his bill of fare, and only such is paid for—so much for "a clear broth," which is truly very clear; so much a pound for bread, etc. Any waste by oversupply is his own loss. The only stimulants used are a weak, sour native wine and Vienna beer. Medicines are supplied at so much per dose in like manner. About thirty cents per

day is the cost of maintaining a patient in the public wards. There are, besides these wards, private wards of various classes for those who can afford to pay more. Everybody must pay something—either the state, city, church, fraternity, family, or friends of the patient must become responsible for the maintenance of the patient. A Viennese pays twenty cents per diem, a foreigner double that amount.

About twenty thousand patients are admitted annually, besides those in the lying-in wards. Happening to be in the receiving-room one day, I noticed over one hundred had been admitted the day before. From eight to ten thousand children are born in the obstetrical wards during the year. The mother is allowed two weeks' residence after the birth of her child. At the end of this time, if she is unable to support it, it is sent to the foundling hospital, where it is fed on cow's milk. About fifty per cent. of these children die in infancy. Those that live and are not claimed by their parents repay the state either by service in the army or other government work. A large number of the cases admitted into the hospital are trivial, and with us would be treated as dispensary patients. The out-door practice here is quite inconsiderable—nothing like the important feature it is in the London hospitals. There are three hundred beds devoted to syphilis. There is no lack of disease in every form and degree, and every clinic is profusely illustrated. The death rate is apparently enormous. The chapel is situated over the gateway between the first and second courts. I have seldom passed that way without hearing the funeral service. The manner of dealing with the dead is curious. Three hours after decease the corpse is removed to the dead-house to remain twelve hours. A rope, which communicates with a bell in the watch-room, is placed in its hands, the slightest movement of which would sound an alarm and bring instant succor. Of all the thousands who have died here and had the opportunity afforded them of pulling the bell, not one has yet

done it. All are dead when they reach the solemn chamber devoted to them. After resting here the required time, the funeral service is performed in the hospital chapel alike on the known and the unknown, on the bodies which are claimed and on those which are destined for the dissecting-table.

The faculty of medicine in the University of Vienna, although it has recently lost in Skoda and Oppholzer two of its greatest lights, is still filled generally by men of world-wide reputation. In fact, only from such men has the choice been originally made. There is no such thing as promotion by seniority, and a Viennese reputation alone is by no means sufficient. Bilroth made his name at Zurich, and was called here from Berlin. In most of the departments there are two separate chairs for each branch. Each professor has lectures in a different amphitheater, and issues his own tickets, which students take or not as they wish. Of course the most popular teachers have the largest classes. Bilroth and Dumreicher are the surgeons, Braun and Spät the obstetricians and gynecologists, while Hebra and Neuman hold the chairs of dermatology. Sigmund and Zeisel lecture on syphilis, Jäeger on the eye, and Rokitansky on pathological anatomy. The teaching by this brilliant array of professors is wholly clinical. The cases for illustration are seemingly without number. The greatest difficulty with the foreign student lies in the lectures being given in a strange tongue. If he has come unacquainted with the German, several months will necessarily be consumed in acquiring a sufficient familiarity with the language to follow the courses. It is for this reason that so little profit is to be derived from a mere visit to a foreign school. It requires residence to learn what it is, and it would require this did one come with perfect acquaintance with the language. One has to dig it out for himself—foreigners can explain nothing. They either don't know, or can't tell it if they do. Their curiosity, if they have any, seems not to have spent itself in fields that interest Americans.

Excellent as is the faculty and splendid the clinics, it is from the assistants that the most practical lessons are obtained. They teach everything. The bulletin-board at the University gate is crowded with the announcements of their courses—on the eye, the chest, the ear, on stricture, electro-therapy, minor and operative surgery, operative midwifery, etc. The following is the manner in which obstetrics and gynecology are taught, as these are the branches in which I am especially interested.

The same practical method prevails in other departments. The student first enrolls himself for the course of the assistant either of Braun or Spät. Rokitansky, jr., is Braun's assistant, and the one whose tickets I took. All the operations are performed under his directions by each student on the cadaver. The various positions are first given which the student must recognize by the touch. The normal deliveries are then gone through with, and afterward the more complicated ones. Forceps deliveries, craniotomy, decapitation, cæsarian section, etc., are practiced. Every operation is performed at least once by each student who takes the course, and is witnessed some forty or fifty times. After this course practice on any complicated case is allowed in the wards. The student registers his name for whatever nights he wishes to be on duty, and his proportion of beds then assigned him. During one night there were forty births, with but five of us on duty.

Another great clinical field is the obstetrical receiving-room. Every pregnant woman who presents herself must go regularly to bed before being examined. At a stated time the professor or his assistant makes the visit, and gives each a separate examination, after which his class is allowed to do the same. If labor is found to be not more than fourteen days off, the women are permitted to remain, otherwise they are given a card specifying the time when they should return. The midwives or nurses attend to the ordinary cases of labor

during the day. Complicated cases are delivered by the professor or his assistant before the class.

It will be seen that the fundamental idea of teaching here is not only to make each one familiar with the sights of the various operations, but to give him personal experience in their performance. Braun interferes as seldom as possible. As often as he can, he simply directs others in the various procedures. His lecture occupies two hours five times a week — the first hour upon obstetrics, the next upon gynecology. He pursues no system; whatever the wards offer form his subject. During the last month I have heard him several times on eclampsia, and at least half a dozen times on abortion and craniotomy. At the end of the obstetrical hour the gynecological lecture is given in another room. Here by an admirably-contrived chair, upon which the patient is seated, each student has a fair view of the cases. Very few remarks are made by the operator, the time being chiefly spent in the operations. Although I have seen at this clinic most of the operations peculiar to this branch performed quite a number of times, the material is not so rich as in the obstetrical department. Ovariotomies are never performed here, but are turned over to the surgeon.

During the last month but few operations were made on account of the Easter holidays intervening. There were four hundred and ten births in the obstetrical wards of Prof. Braun during the month, and the few of us remaining during the holidays had our hands full.

Prof. Braun is about fifty years of age, has a pleasing face, and is a thorough German in appearance. His size is about that of Prof. John Crowe, of Louisville. At seven o'clock every morning he walks his gynecological wards, followed by his private students. Each case is examined, explained, and prescribed for. This occupies about one hour. From one to three o'clock he gives a clinical lecture. The various operations are performed before the class. He delivers his lectures

sitting; speaks very slowly and distinctly, but with little animation, offering in this respect a striking contrast to the fiery style of his assistant, Rokitansky, jr., who bids fair in his chosen field to rival the reputation of his illustrious sire.

There is a daily average of thirty-five applicants for admission into the lying-in wards, ten or twelve of whom are generally rejected. After being admitted the patients are assigned to their respective wards, and the students given their proportionate number of cases. Before a student, however, is placed in charge of a complicated case, he is required to have taken a course of operative midwifery on the cadaver with one of the assistants to the clinic. This course lasts six weeks.

As in the obstetrical department so in the other branches, the instruction is as practical as the nature of the subject will admit. The usual length of the operative courses is about six weeks, when they are immediately repeated. The professors lecture five months in winter and three in summer. The fees vary from ten to fifty florins for each course. A foreigner pays double the amount required of an Austrian.

The death of Prof. Oppholzer and the resignation of Prof. Skoda are serious losses to the Vienna school. Their successors have not yet been appointed. Neimeyer would have been called to succeed Oppholzer had his life been spared.

We have in the gynecological wards four cases of ovarian disease, which will be operated on this month. If they prove of interest I may give you an account of them in a future letter.

VIENNA.

ON THE ORIGIN AND TREATMENT OF EPIDEMIC CHOLERA.

BY LUNSFORD P. YANDELL, M. D.

Interest in cholera is again revived in the public and professional mind by the apprehension, for which there appears to be much ground, that the scourge is once more about to revisit our country. In all its previous visitations the epidemic has reached our shores by nearly the same route, and that is the route by which it is now advancing in this direction. Always originating in Hindostan, it has first invaded Russia in its westward march, and proceeding through Poland and Prussia to England and France, has at last crossed the ocean to this continent. For a good many months past it has been ravaging Persia, where famine had prepared the way for the pestilence, and moving slowly through the steppes of southern Russia it has reached Poland and the eastern provinces of Prussia. Great efforts are being made by the sanitary boards at the seaports threatened with the disease to keep the unwelcome intruder away by quarantine. The issue of these efforts will be looked for with the keenest interest by all the medical world. Quarantine up to this time has never succeeded in excluding cholera, and some physicians go so far as to predict that it never will. I hope they are mistaken, but the chances for success certainly do not appear encouraging. The difficulty of rendering quarantine absolute is so great that the infection, it may well be feared, will continue for a long time at least to elude all the measures devised for its exclusion.

Malignant cholera is indigenous to India, where it prevails to a greater or less extent every year. It has been mentioned by French and British medical writers as one of the most

striking endemics of that country ever since it was first visited by Europeans; but it was not until after an epidemic of extraordinary violence, which prevailed in 1817, that special attention was attracted to the disease. After committing great ravages among the natives as well as the British troops in India, this epidemic began to show a disposition to break over the barriers by which hitherto the plague had been limited, and in a few years extended to Russia. Up to the period of this outbreak Europe had felt no fears of an invasion from cholera, but uneasiness was now excited by its westward march; and one of the princes of Germany, about 1822, offered a prize for the best essay on its prevention and treatment. Dr. Caldwell, in 1823, read to his private class, in Lexington, a paper which he had written with reference to that question; in which, I remember, he insisted upon the inefficacy of quarantine, and contended that Asiatic cholera was nothing more than cholera morbus in an epidemic form.

The pestilence spread slowly from Hindostan through Russia, and was fourteen years reaching England. Moving slowly through Poland, and spreading over Prussia, Austria, and Hungary, it was finally announced as having broken out at Southampton in 1831, and in a little while was raging in London.

And now the question began to be asked with concern whether, in time, it would not probably reach America. The broad Atlantic was still between us and the disease, and the pure sea-air, it was hoped, might prove an effectual bar to its progress. But from England—or from Ireland, where it had spread from England—it came next summer to Quebec, whence it speedily ascended to Montreal, up the St. Lawrence, and across the country west to Chicago and St. Louis and south to New York and Philadelphia. From these centers it was transmitted, later in the season, to Cincinnati and Louisville. A steamer from New York arrived at New Orleans the same summer with cholera patients on board, and the

epidemic soon afterward spread through the city. In all the places mentioned, except Louisville, it prevailed with extreme fatality. About the 1st of November a few cases were witnessed at Lexington. On the 5th I was applied to about noon by a temperate, industrious foundryman, who complained of a profuse diarrhea, for which I prescribed. The disease turned out to be cholera, and the remedies directed not proving effectual, I had the mortification to find my patient in fatal collapse at sundown that evening. Several other cases of the disease, it was discovered next morning, had ended fatally during the night; but these first were also the last cases in Lexington that season—a happy turn of things, which was ascribed to the intervention of a white frost at that critical juncture. On the return of warm weather it broke out afresh, and with a malignity seldom exceeded by the epidemic anywhere. In a population of six thousand there was a mortality of sixty in one day, and as many as four hundred and fifty were carried off by the disease before it subsided. The epidemic spread widely over the country during the summer, breaking out again in a mitigated form in Louisville, and extending to most of the towns in central Kentucky. Nashville and Shelbyville, in Tennessee, were visited the same season. Some towns in its course escaped this visitation, but only to suffer from the scourge two years later. Versailles, near Lexington, and Murfreesboro, on the high road from Nashville to Shelbyville, were healthy in the midst of the pestilence of 1833, and in 1835 were attacked when the towns around them were in the enjoyment of good health. Finally, the disease invaded Charleston in 1836, and then disappeared from the United States.

After the epidemic had subsided, the question naturally arose in the minds of all whether we were now finally rid of the cholera, or would it probably return after a time, and at length settle down as one of our annual endemics. We had not to wait many years for an answer. In 1844 the

pestilence began to give evidences that it was about to spread again beyond its birth-place on the Ganges. Its march this time was far more rapid than before. In three years the malady was raging in Russia, and in four from the time of the outbreak in India it had invaded France and England, and had reached the United States. It touched our shores in December, 1848, at two points about the same time. The ship New York arrived at Staten Island with cholera cases on board, and within a few days the Swanton reached New Orleans, bringing patients with the disease. Very few cases were developed in the vicinity of New York for several months; but the complaint soon became epidemic in New Orleans, and extended up the river as far as Clarksville and Nashville on the Cumberland and St. Louis on the Mississippi. It prevailed in the month of January following with considerable mortality in Clarksville. Cases were brought by steamboats from New Orleans to Louisville, but there was no spread of the disease in the city during the winter; but as warm weather set in cases became numerous, and in a little while cholera was epidemic all over the country. It was especially fatal in St. Louis and Cincinnati, and was also severe in Lexington and Nashville. It reäppeared in Louisville in 1850, and with a malignity probably never exhibited by the disease in this place before or since. In Nashville it returned that summer with great intensity. On the 4th of July I was told by a physician there that not less than a hundred people had died of cholera in the city and its neighborhood in the previous twenty-four hours. During the succeeding summer some local outbreaks of the disease took place in Louisville, and the pestilence lingered in the country until 1855, when, I believe, it again ceased to prevail epidemically. English writers speak of the outbreak of 1854 as a third return of cholera to that country. With us the epidemic seemed continuous from 1848 until it subsided; appearing one season in one region of the country, and breaking out

again at the same spot, or starting up where it had not been before, the following year.

In 1860 cholera again began to prevail with unusual energy in the valley of the Ganges, and toward the close of the year broke out in Teheran. In 1861 the most fatal epidemic that had raged since that of 1846 afflicted the country, and spreading over the northwestern provinces of India extended the same year to Arabia, the beaten westward track of the pestilence. Four years later it had reached Gibraltar, and in October, 1865, cases of the disease were reported at Southampton. It was epidemic both in London and New York in the summer of 1866, and was soon raging throughout our middle and southern states. This visitation proved to be short. After a single season cholera, I believe, was not heard of as an epidemic anywhere in our country, though some local outbreaks were mentioned in a few places.

The foregoing narrative, it will be admitted by most readers, I think, justifies the statement which has been made that epidemic cholera always has its origin in India. In every instance in which it has spread abroad it has been traced back to that source, and in its progress it has been seen to follow the great lines of commerce and travel from that continent, moving slowly where men pursue their journeys on foot, and increasing its speed with every improved mode of intercommunication. Requiring years to pass from Hindostan to Russia, it crosses Germany in a few weeks, and the Atlantic Ocean in as many days.

The first cholera epidemic had ravaged France and England a year before it appeared in this country. When it came in 1832 it spread in a short time from Quebec to New York, and before summer was over had fallen upon Cincinnati and Louisville; but it was late in autumn before any cases occurred in Lexington, and Nashville escaped until the following year. In the last epidemic we had hardly heard of the

disease as prevailing in London before cases were announced in New York.

One of those periodical aggravations which characterize the pestilence in the land of its origin was reported in Hindostan in 1840. In 1846 the distemper was still creeping over the steppes of Russia, and in 1848 it broke out in Germany, France, England, and the United States.

The epidemic was again virulent in India in 1860. In 1866 it had traversed all the great space between that continent and England, and was also prevailing in this country from New York to Texas. The effect of steam in promoting the rapid diffusion of cholera is rendered very evident by these details.

That epidemic cholera owes its diffusion to human agency, and is carried from point to point by men in their journeyings, is an idea that was entertained by few American physicians when first introduced to the disease. That it was caused by a specific poison peculiar to India, which was borne across the earth by the atmosphere, or that it depended upon a miasm generated upon the spot, were the two doctrines which then divided the minds of our medical men; but since that day professional opinion has everywhere undergone a great change on this subject. The number of physicians is very small now who question the portability of cholera, or its origin from a specific poison in India.

Dr. John Murray, in a paper read before the British Medical Association at its last meeting, declares that of five hundred and five medical officers who reported to him in India on the spread of the disease, but *five* entertained any doubts on this point. Dr. McNamara, after the examination of nearly three hundred thick volumes of manuscript reports by officers of the Bengal service, comes to the conclusion that "every outbreak of cholera beyond the limits of British India may be traced back to Hindostan through a continuous chain of human beings affected with the disease, or through

water contaminated or articles stained with their dejecta." The "Cholera Commission," which met at Constantinople in 1866, reported to the same effect. To the question as to the source of the epidemic, they replied that "they were able with one voice to answer without hesitation that the Asiatic cholera, which at different times has run over the whole world, has its origin in India, where it had its birth, and where it exists permanently as an endemic." This body also declared unanimously "that no fact has proved up to the present time that cholera can propagate itself at a distance by the atmosphere, whatever may be its condition; and that never has an epidemic of cholera extended from one point to another in a shorter time than was necessary for man to carry it." In these sentences, it is safe to affirm, is expressed the judgment of the profession on this question. Physicians in all parts of the world are so nearly unanimous about it that it would be a waste of time to adduce any facts in support of the position beyond those already stated; but while such is admitted to be the origin of cholera and its mode of propagation, it is well known that its cause is one which is not operative under all circumstances alike. The *materies morbi* depends upon local influences and atmospherical conditions for its development and activity. However it may be in Russia, where it is said to have prevailed in the depth of winter, in our latitude the disease prevails only when the thermometer is high. Except in our southern states, it has never been epidemic in this country during the winter season. It was imported into New York in December, but there was no spread of the poison during the winter; while at New Orleans it was rapidly propagated, and spread the same season as far north as Clarksville, in Tennessee. Numerous cases were brought by steamboats from New Orleans to Louisville, and many more patients died of the disease on their passage during the winter, but it was not communicated to our citizens. Now and then a case was reported in the neighborhood of

the Marine Hospital, where cholera patients were taken from the boats, but there was no extension of the disease while the weather continued cold. In March the thermometer rose for a time nearly to summer heat, and then bowel complaints became frequent and the cases of cholera increased in number. On the 1st of May the thermometer was 86°, and on that day five cases of cholera were announced on Fifth Street, near the river. Under the high temperature, which continued till the middle of the month, the disease still appeared in various parts of the city, and was increasing on the 17th of June. On the 26th of June, the weather being wet and the thermometer 92°, twelve deaths occurred in the city, and the epidemic was reported to be raging in Lexington and St. Louis. Later in the summer the pestilence broke out with violence at a few points in Louisville, but never prevailed over the city as an epidemic.

Of the agency of local causes in determining the direction and the fatality of cholera, we have the most ample evidence; and no fact in the history of the disease is more important than this, pointing as it does to the means by which we may expect to avert the epidemic, or at least greatly abridge its mortality. The apparent capriciousness of the disease was remarked early in its progress toward Europe. It passed by some places in its march without touching them, while others in their neighborhood were devastated. A few circumscribed spots in a town were the seats of a deadly pestilence at a time when general health prevailed. It visits with violence one city on every recurrence, and returns again and again to another without ever becoming epidemic. Not a few towns and villages there are on its beaten track from Hindostan to England which have always escaped the infection. There are more in the United States where the disorder is still unknown, and these not isolated places or out of the path of the disease. In all that wide region of Virginia which embraces its mineral springs not a case of cholera has ever

yet been reported. The cause of this irregularity, in many instances, has seemed to lie upon the surface. We have thought that we could explain the outbursts of the complaint by vicious sanitary conditions. These conditions always exist at the fountain-head of the epidemic, on the Ganges. There it may uniformly be traced to filth, bad water, and unwholesome or deficient food, all made more injurious by overcrowding and toilsome pilgrimages. Everywhere in its progress round the globe a certain relation has been noted between cholera and these noxious conditions. Those places, as a rule, have suffered most where the state of things appeared to the eye most unfavorable to health. Crowded, filthy, badly-ventilated dwellings have been the favorite abodes of the disease. Whatever depresses the vital forces and impairs the health renders the poison more operative. Foul air, impure water, a humid, filthy soil are the circumstances which appear especially favorable to its development.

But we are compelled to admit that there are many apparent exceptions to this law. It is not the places that seem to present the most favorable conditions for the disease that are invariably attacked, nor those in apparently the best sanitary state that uniformly escape. Lexington certainly seems to afford fewer conditions for the propagation of cholera than Louisville, and yet in every visitation it has been much the greater sufferer from the disease. On a most careful inspection, an observer would find it difficult to discover the causes which impart a virulence to the epidemic in Nashville, Saint Louis, and Cincinnati which has never characterized it in Louisville. It would not be easy in every case to point out the circumstances which determined the epidemic to a few spots in this city to the exclusion of others close by, and presenting to the eye absolutely the same appearances; and it would be hard to say why it passes over a place one year, after raging all round it, to return to it two years later in the midst of prevailing health. Local causes undoubtedly

determine it all, but what these are we are unable in the present state of our knowledge to affirm with any confidence. *Causa latet, vis est notissima.*

Besides propagating itself by the method now conceded to be the usual one, there can hardly be a doubt that the poison of cholera floats in the air, and may thus be transported from one quarter of a town to another, or from a tainted ship anchored near a port; but facts go to prove that it is never in this way conveyed over great spaces.

The question of contagion is one which has excited much interest since the first epidemic of cholera. At that day the great body of the profession, in which number I include myself, rejected the idea of the disease being communicable from person to person; but such is not now the fact. I confess I am not able to see how we can escape the conclusion that it is contagious. Portability, to my mind, involves the idea of infection. Something emitted by cholera subjects is the cause of the disease, which may in a few hours develop it in others, or may be carried about in water or clothing, and propagate it at a distance and after an interval of time. This is now the general conclusion in regard to the matter. In a lecture on the subject, lately delivered, Sir Thomas Watson uses these words: "Very few, I imagine, of the original doubters remain unconverted to the doctrine which I have held from the beginning, that epidemic cholera is *catching*." And Dr. John Murray, in the paper already referred to, says that only one medical officer in a hundred connected with him in the East India service doubts its communicability. At the same time facts abundantly show that it is only slightly contagious—that by far the greater number of those who are exposed to the complaint escape the infection. Dr. Murray states that he has had opportunities of seeing cholera in India ever since 1833, in which time he "has attended thousands of cases, and only contracted the disease three times, which yielded readily to early treatment." And he

infers from his long experience that while the disease is contagious, there is no "very great danger in attending on the sick."

Experience having taught how local and often how circumscribed the cause of cholera is, our efforts at preventing the disease should be directed to the removal of all the causes known to be unfriendly to health. This is the true policy of communities at all times; for whatever tends to develop cholera must favor the rise of other diseases. All sanitary conditions ought therefore to be made as perfect as practicable in anticipation of an outbreak of the epidemic.

In case of an outbreak of cholera, the safest course is to fly from the seat of the infection. Such was not our advice in 1833, when the whole atmosphere was supposed to be tainted by the pestilence, but I have no hesitation in giving it now. In large cities, of course, a general flight would be impossible, but there is nothing to prevent it in smaller towns and in the country. I witnessed the happiest effects from the adoption of this course in 1849, when the epidemic prevailed in the country near Murfreesboro. Again and again I saw it arrested on plantations by removing the people from their houses for a short time to tents in the woods. The poison spreads but a short distance through the atmosphere, and safety is attained by moving a little way from its source.

Treatment. In no other disease perhaps does the success of treatment depend so much as in cholera upon the time at which it is resorted to. At one period of the disorder our remedies are almost certain, at a later period they are nearly worthless; and these stages are often separated from each other by only a few hours. The diarrhea which ushers it in is generally spoken of as a "premonitory symptom," but it is in truth the "prodromic stage" of cholera; and this is the fact connected with the disease which ought above all others to be impressed constantly upon the public mind. Diarrhea, when the epidemic is prevailing, should be regarded as cholera. In

many instances diarrhea persists a day or two before more alarming symptoms supervene, and it almost always affords time for the successful use of remedies if its first warning is regarded. Occasionally, it is true, this premonitory stage lasts a very short time; the patient succumbs almost immediately to the poison, and collapse ensues in a few hours. In such circumstances our art is unavailing, but fortunately these in every epidemic are the exceptional cases.

Calomel, after an experience of many years, I still place first in the list of remedies for cholera. I should not now employ it so exclusively as I did in the first epidemic at Lexington, nor would I prescribe it in such doses. I have long been convinced that many of us then gave the remedy in quantities very much larger than was necessary. When attacked by the disease, I took myself at one time sixty grains, and by the advice of my old friend, Dr. Cooke, a few hours after, doubled the dose. It was my common practice to give it by the drachm, and to one patient, a young lady, I gave an ounce in two doses. Dr. Cooke gave it by the table-spoonful; and one of his patients, who is now living, took two pounds during his illness. No injury resulted from this dosing that I could observe beyond an occasional sore mouth; but the practice is not rational, for nearly all the calomel, which is eminently insoluble, passes through the intestinal canal unchanged, and I should not pursue it again. But I would still give calomel in doses of a scruple, or half a scruple, where the case was threatening; and would insist upon its use, though in smaller quantities, in every attack of diarrhea. Whether the doctrine of "elimination," now the fashionable one, be true or not, and calomel relieves by removing the poison from the blood, or by some other mode of action unknown to us, certain it is that whenever its characteristic dark, consistent discharges are secured, the cholera patient, according to all my experience, is safe. The calomel should be repeated more or less frequently, according to the urgency

of the case, until the character of the alvine evacuations is changed.

Opiates are of the first importance, in conjunction with calomel. No doubt they have been greatly abused. In the epidemic of 1849 especially their use was carried to great excess. I saw patients in a state of profound narcotism, who seemed to me to be dying from the effects of the medicine rather than the disease; and it was the remark of one of the best practitioners in Louisville at that day, Dr. Coleman Rogers, that "opium was killing more people than cholera." But, for all this, opium in some form appears to me a most necessary remedy in this disease.

It is probably true that we have exaggerated the mischief done by the discharges in cholera. It is unquestionably a fact that in some of the most malignant cases there is no vomiting, and that the purging is not profuse, and that collapse is therefore not always the result of wasting evacuations; nevertheless it can not be doubted that these constitute sources of danger, and one of the indications of cure is to arrest them. With this view some of the preparations of opium should be administered on the first appearance of suspicious symptoms, and repeated according to the urgency of the symptoms. The failure to combine opium with calomel, whereby the diarrhea is checked until time is afforded for the mercurial to act, seems to me now to have been an error committed by some of us in the treatment of cholera at Lexington. I should by no means rest upon an opiate, but look to the mercurial for restoring the secretions to their healthy condition; but I would not now rely upon calomel alone in any case of cholera. My practice has been to give opium, in some of its forms, without any of the carminatives usually given with it; but there may be some advantage in combining pepper and asafetida or camphor with the opiate, which may be given in a pill or in the liquid state. Dr. Murray strongly recommends a pill of one grain of opium combined

with two grains of black pepper and three of asafetida, remarking that "it does no harm if needlessly administered;" and adding, "these pills have been distributed in tens of thousands in the towns and villages of India with most satisfactory results." In conjunction with these remedies alcoholic stimulants are useful, restraining the diarrhea and supporting the vital powers.

This is the plan of treatment which I should pursue in the first stage of cholera—the curable stage; and I may remark that it is in accord with the now reigning theory of cholera, its tendency being the removal from the system of the cause of the disease. Substantially, it is the plan recommended by the leading practitioners of England. I attach more importance to mercurial purgation perhaps than they do; but the latest opinion there favors evacuation, either by castor-oil, rhubarb, magnesia, or calomel.

Collapse sometimes comes on before the nature of the attack is comprehended, and before the symptoms have excited alarm. This is no doubt one reason why cholera is far more fatal when it first breaks out in a place than at a later period of the epidemic. I believe the great mortality at Lexington, of which I have more than once spoken, was due, at least in part, to the fact that the malady being new to the people, and the number of physicians in the town insufficient, a large proportion of those who were attacked were either in collapse or on the verge of it before they had any medical aid. It will turn out always that the result of treatment in this disease depends upon our success in arresting it before it reaches the stage of collapse. In this stage certainly all plans of cure have generally proved unavailing; but it is not correct to say that the condition of the patient even then is hopeless. Thousands, it is not too much to say, have recovered from this unpromising condition, and we are not to give up our efforts because our patients have become blue and pulseless. We must especially avoid doing in that stage what will

result in mischief should reäction be established. Opiates and stimulants are tempting agents at this stage, and are often given in great quantities. They exert no power while the subject is in collapse. He is neither narcotized nor stimulated by them, for they are not absorbed. But when, as sometimes happens, the vital forces rally and the circulation is restored, these substances are taken up from the stomach and become fatal agents in the system. Valuable as they are at an early period, they are inefficient at this stage; and, if given at all, should never be administered in dangerous doses.

What the best treatment for this stage of cholera is it would be difficult to say. Patients have got well under every system, and as often perhaps when nothing was given them but ice and cold water as under any other treatment. The cold dash has been credited with a good many cures; so have calomel, ice, cold water, and brandy; but one would risk a good deal who should assert that these recoveries were not more due to the *vis medicatrix naturæ* than to any action of the remedies used.

Patients in this state sometimes retain much of their strength, and insist upon rising to obey the calls of nature, and may even persist in walking about their rooms. Perfect rest should be enjoined at all times. Death has often resulted from attempts to rise. Cold water and ice, when craved, should be given *ad libitum*. Stimulants in moderation do no harm, and when the powers of life begin to rally are serviceable. Calomel, if not administered before, may now be given, in the hope that with reäction, should that occur, it may be absorbed, and act favorably on the bowels. Gentle friction with the hand should be employed. For the cramps, which often form the most painful symptom in the disease, we have no remedy so efficient as chloroform, and it may be used with great relief to the patient. Warm applications would seem to be indicated, but I believe experience has

shown that better results have been obtained from cold affusions.

During the prevalence of cholera we are constantly asked by people how they shall live to avoid it. My advice is to make no change, unless there has been some bad habit, but to eat and drink as usual. Diet is of no avail against cholera; and should the disease show itself in any disorder of the bowels, the first symptom should be met at once by proper remedies.

It was long ago observed of yellow fever, and the remark is equally true of cholera, that altitude affects in a marked degree the fatality of the poison upon which the disease depends. Persons sleeping in the second and third stories of houses are much less liable to attacks than those who sleep below. Dr. Farr has revived interest in this subject by some late statements, one of which is that "the elevation of the soil in London has a more constant relation to the mortality of cholera than any other known element." The mortality he found to be inversely as the altitude. The practical bearing of this law is obvious and most important. Safety is to be sought by residing and especially by sleeping in elevated rooms.

It is an exceedingly disgusting thought, but still one which we are forced to entertain, that we may take in the poison of cholera with our food and drink, and in this way obtain the disease. A little of the rice-water excretions, it is supposed, may get by accident into the water drank, or become mixed with the food taken, and, multiplying in the alimentary canal, set up the fatal disorder. The supposition is plausible, and has many facts and many advocates in its favor. The possibility of its truth is enough to suggest the most extreme caution in regard to the danger. Every precaution should be taken to place the dejections of cholera patients where they can not possibly endanger the friends and attendants. It should be seen to that the air and soil are absolutely

without fecal impurities, and that the water is also from a source to insure its purity.

A NOTE ON CARBOLIC ACID IN INTERMITTENT FEVER.

BY L. P. YANDELL, JR., M. D.,
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In the June number of this journal Dr. Melvin Rhorer published a translation from the German of Freulich, in which carbolic acid is claimed to cure intermittent fever, chronic and acute, more rapidly, more certainly, and with fewer relapses than any other medicine. The average quantity required is stated to be four and a half grains, and the maximum nine grains. Eight cases of intermittent fever, which had effectually resisted quinine, occurring in inhabitants of excessively miasmatic districts, who continued to be exposed to malaria during and after treatment, were cured by his prescription. Some required only three grains of the remedy; a few took nine grains. There were no relapses.

Dr. Freulich's success is marvelous. Several years since, when carbolic acid was given for every imaginable disease, a considerable number of experiments with the new remedy were made by myself, at the University Dispensary, in malarial fevers. It was administered in half-grain doses, and three to six grains were given in twenty-four hours. The treatment was abandoned, after a fair trial, as utterly futile.

The wonderful results of Dr. Freulich's little doses, however, induced me to give carbolic acid a second trial. In order that the drug might show its power unassisted, the gentian infusion was substituted by water. Well-marked intermittents were selected, most of the cases being at the

University Dispensary. The number of cases experimented upon was between forty and fifty. Table-spoonful doses, thrice daily, were given for two weeks in the majority of cases, and a number of patients took it three weeks. Only two reported themselves cured; several imagined themselves somewhat benefited, but certainly in almost all there was no perceptible effect produced.

My experience with carbolic acid then leads me to class it, in point of efficacy, with corn-meal, table-salt, lemons, coffee, spiders, spider-web, and the myriad other ague-cures of domestic medicine, all of which have sometimes broken up intermittent fever. The only modern substitutes for quinine which in my hands have proved worthy of commendation are sulphate of cinchonia and salicine, both of which are reliable antiperiodics. Next to these is a powder, consisting of four grains of alum and three grains of the dried sulphate of iron, given thrice daily for seven to fourteen days. In chronic intermittents this combination is exceedingly efficacious. Strychnine has not yielded satisfactory results in my practice.

Reviews.

A Treatise on Diseases of the Nervous System. By Wm. A. Hammond, M. D., Professor of Diseases of the Mind and Nervous System and of Clinical Medicine in Bellevue Hospital Medical College, etc. New York: D. Appleton & Co. 1871.

Owing to certain peculiarities of diet, climate, and modes of life, the predominating temperament among us Americans is the nervous. A wide-spread exaltation of the nervous system has been gradually brought about by the active necessities of a new civilization, and the stimulus of quick reward for well-directed and persistent labor; both conspiring, by the immense wear of mind and body, to upset the balance of nature's powers.

We take no time for the recreative leisure that is best calculated to knit up the raveled sleeve of mental exhaustion. The worker, like our working-day country, rejoices in but few holidays. Dr. Hammond resides in the metropolis, the very vortex of this unresting current. Associated with its largest hospitals, and consulted in many private cases because of his conspicuity as a man of scientific acumen and rare conservatism, he has had opportunities peculiarly favorable to research upon nervous maladies. The book before us shows how well prepared he was for improving the opportunity, and how well fitted for the business of interpreting disease and expounding the principles of cure. The opinions herein contained are quite decided even upon questions still vexed by his collaborators, but they find a basis sufficiently firm in an extensive field of professional practice and varied courses of experiment.

Where Andral* deduces laws and fixes the direction of treatment from one hundred and fourteen cases of cerebral congestion, our author extracts from a private note-book six hundred and twenty-two, and is therefore entitled to speak with a voice, in the same measure, more authoritative.

The diagnosis of that affection simulating so closely, as it sometimes does, cerebral anæmia or hemorrhage or meningitis or epilepsy, was a task that frequently surpassed the powers of Andral's well-trained intellect, for he deplored the inadequacy of his means of investigation to determine the infinite variety of its symptoms, and many since his day have echoed the lament.

It appears that later inventions and a broader range of view prompt Dr. Hammond to say that from each of the affections for which there is liability to mistake it "it is distinguished by well-marked characteristics," which he proceeds to describe with exquisite nicety of detail in terse and masculine language. He has a happy faculty of portraying symptoms, barring a certain tendency to define his lines rather too sharply for strict fidelity to nature. His experience may possibly bear him out in making his statements so precisely, and will probably warrant him in adopting the confident tone which is heard repeatedly when laying down the law of treatment; still they will excite surprise in the many whose conceptions of the marks of identity and method of removal of nervous ills have been far from satisfactory. The ophthalmoscope, the dynamograph, electrical machines, are instruments comparatively new as applied to their diagnosis, and but few physicians have learned to wield them with the practiced skill which educes reliable results. No apology is needed for this cast of dogmatism, which is but the earnest quality of expression necessary to enforce credence. When a man has honest convictions that are well assured, let him tell them in a downright way. They can carry no more weight to

*Clinique Medicale.

influence other men than their verisimilitude and his reputation as a true observer entitle them to.

The voluminous writings of the author have always exhibited toward matters of popular belief that "healthy skepticism" which accepts nothing as a fact until proven. Rather would we distrust our own partialities of opinion than the deliberate impressions of "a prudent man who looketh well to his going." All merited following shall be accorded him if in this energy of assertion he makes things clear and manifest which otherwise would be perplexed and obscure.

The introduction deals with the special apparatus employed in the diagnosis and treatment of diseases of the nervous system. It describes the ophthalmoscope, and explains the manner of using it as a diagnostic aid in these affections. The æsthesiometer, dynamograph, and several other valuable appliances, meet with due attention, while electrical instruments have signal prominence given them. This portion of the book shows the author no less ingenious as a maker of new instruments than as a maker of phrases to vividly present their construction and design.

Five sections make up the body of the work, treating severally of diseases of the brain, spinal cord, cerebro-spinal disorders, diseases of the nerve-cells, and diseases of the peripheral nerves. The nosology does not conform to ancient usage, being based upon the anatomical location and the character of tissue change. There are exceptions, however, as from the nature of its symptoms, hysteria is provisionally classed among cerebro-spinal affections. We should like to have seen a full chapter on cerebellar disease instead of the few paragraphs devoted to it in the discussion of the function of coördination.

It is pleasant to find that no diseases of the sympathetic system have been embraced in this collection intended for medical guidance. Out of the love of accuracy that comes of analytical habits of thought, space is denied those airy specu-

lations about the morbid action of the sympathetic which have impaired the reasonableness of some other books we have recently seen. Though of a very consequential office in the maintenance of life, so little is known about its unhealthy states that baffled pathologists have with much license made it the place of escape for their difficulties of whatever kind. A systematic consideration of it as a seat of morbid processes should be postponed until their existence shall be something more than hypothetical.

The differential diagnosis between cerebral congestion and cerebral anæmia, and their antithetical modes of relief, are considered at length. These chapters will stand as excellent examples of well-conducted inquiries, and illustrate finely the uncommon perspicacity of their writer. If what is written in this relation be wholly or only in great part true, any one is to be blamed who hereafter has nebulous views upon the subject.

From what has been already reported, it will be readily conceived that within the restricted scope of this article particular mention can not be made of every useful and novel idea here advanced, but only the few that strike the vision in a general survey.

In more than half a thousand instances of cerebral congestion the author has never seen one where the abstraction of blood from the arm was required to lessen the force of the circulation. Cups and leeches applied about the head have been more satisfactory. They are combined with other remedies, such as the constant galvanic current, which is recommended from its putative power over the vaso-motor nerves.

Priority is claimed in demonstrating by the ophthalmoscope that galvanizing the cervical sympathetic contracts the cerebral vessels. The effects of this practice have been so decided as to establish it among the best means of cure for hyperæmia of the brain; but the foundation of his postulate upon examination of the retinal vessels may be looked upon

as still unsettled. It transpires in a late work* that experiments made by a number of cultivated ophthalmoscopists show that anæmia of the vascular system of the retina was not only not a uniform result, but that hyperæmia may sometimes be produced. As might be expected, the bromides are spoken of with a warm commendation.

At the close of the observations upon cerebral anæmia unusual vigilance is urged lest it be confounded with the opposite condition, and the concordant treatment prove a positive aggravation of the trouble. The stress given to this injunction shows how a practical turn has been sought even at the expense of a literary repetition, which may be assailed by carping criticism. It seems to us that the warning and the insistance are timely. We have had occasion very recently to mark the appropriateness of such a caution. As confirmatory of the author's account, and illustrative of the point under review, it is fitting to cite a case bearing upon it. Jane H., at the Louisville Hospital, was convalescent from remittent fever. The right side became suddenly partially disabled by lesions of motion and sensibility. From a cursory consideration of these symptoms cerebral congestion was suspected, but under the bromide of potassium and revellents she became worse. A more careful examination revealed the cardiac and venous murmurs of anæmia, dilatation of the pupils, extreme sensitiveness of the retina, precluding the use of the ophthalmoscope, and intense pain on the right side of the head. These, according to Dr. Hammond, are indications that a tonic and stimulating course would be suitable, and the other plan related above would be injurious. And so it turned out; for after the cessation of the first regimen very happy results were obtained by iron, quinine, strychnine, whisky, and nutritious diet, as advised by the author.

The chapter on multiple sclerosis is familiar to the reader of the Practitioner, as it was published in a former number.

* Beard and Rockwell's Medical Electricity, page 276.

If it is desirable to sketch the characteristics of the book in a few words, they might be those of Bacon's golden aphorism: it is "neither a follower of novelty, custom, nor antiquity." That it does not "servilely follow authority" may easily be discovered in the unwonted signs of individuality of thought stamped on almost every page. We turn the leaves at random, and open near the middle, at spinal congestion. Now, to compare the description before us with the corresponding one in some other standard work—say Reynolds's System of Medicine.* The latter names among the distinctive symptoms, no anæsthesia with the paraplegia, no loss of control over the bladder, no diminution of electro-contractility and electro-sensibility. Dr. Hammond,† on the contrary, asserts that partial anæsthesia is pretty constantly present, the bladder very generally affected with palsy, and the electro-contractility and sensibility of the paralyzed parts always more or less diminished.

Our faith in the statement of the first quoted authority, that the "spinal congestion is not less definite in its history than myelitis," is a little shaken by the changes of belief rendered necessary by the discrepancy of the two accounts. We are inclined, for reasons before mentioned, as well as from other reading and limited observation, to think the latter picture has the truer touch, though we must dissent from the too decided line in the delineation which occurs on page 390; *i. e.*, "the urine is never alkaline." In the light of a previous paragraph, page 387, in the same chapter, this seems to us an overstatement. It would be more exact to modify this clause by adding such a one as "except when ammoniacal from serious involvement of the bladder."

In therapeutics our author commonly states his own views connectedly, seldom pausing to answer and refute opinions of the many teachers who differ from him. Of course this

* Vol. II., pp. 623 and 624, Dr. Radcliffe's article.

† Page 328, present treatise.

is not the result of deficient acquaintance with the literature of this branch of medicine. Enough of curious medical lore, and the results of original investigations among nature's laws, exhibit that his many-sided culture has enabled him to compass completely the circle of his theme. The numerous subjects treated would make any other course unsuccessful, even if his views conflict with those of other much-respected writers.

He is very fortunate in that his theories of pathology consist so harmoniously with those of remedial action. Where some have advised remedies from empirical evidence of good resulting from their use, he dovetails in the happiest way a logical therapy, grounded on unequivocal experience, with the latest refinements of morbid anatomy.

From the nature of the diseases dealt with, and the fame of its author, this book is destined for a wide reading. Its highly interesting pages will richly repay the perusal of the layman. By its assistance the physician who has been years in practice may retraverse the severe road of former study as if on a pleasure excursion; but it will reward most of all him who carefully balances its arguments and endeavors to profit by its gathered wisdom. J. W. H.

Transactions of the South Carolina Medical Association. Charleston, 1871.

There is something of much more than ordinary interest to us in the appearance of a volume of Transactions from the Medical Society of South Carolina. It awakens in our minds most pleasant associations. It carries us back to the period when Charleston was one of the great literary and scientific centers of our country—when we were accustomed to look to South Carolina for some of our most original papers and most learned books—when her scholars were among the foremost that gave character to American literature. We hail this

volume with no ordinary pleasure as a promise and a presage of the revival of the literary and professional spirit of those glorious days. We trust it will be followed by others in future years, each larger and showing a greater number of laborers than that of the year before.

The volume before us contains some excellent contributions to medicine. The first is from the pen of Dr. F. Peyer Porcher, and treats in a philosophical way of the "Utility and Inutility of Medicines," among other topics of interest to the profession and the people. Dr. Porcher has faith in the value of medicines, and holds that by good management many cases of disease which would otherwise end in death may be conducted to a favorable termination. He has no doubt—and in this he certainly has the profession with him—that our predecessors often failed in the cure of malarial fevers where we succeed, because they had no quinine, and were afraid of fresh air and cold water, and used calomel and the lancet to excess. "My own opinion is," he says, "that medicines hold a secondary rank, but still a very important one, and that they are potent in their influence both for good and evil. The doses, and the frequency with which they are administered, often make a very great difference in the result. Sometimes expectancy is useful, and sometimes it is out of place, and great vigor and promptitude and heroic medication are required to save life. The first-named method, if applied to the latter class of cases where the heroical system is required, will indeed be a 'meditation on death.'" But, after all, he correctly adds: "Food is the principal agent in the cure of a large proportion of the maladies which we have to treat." All other means, he thinks, sink into insignificance in comparison with this. And so "the great end and object of all our therapeutical efforts in the large proportion of cases is to restore the diseased organs, particularly the intestinal canal and its appendages, to that condition of integrity by which they can absorb and assimilate food."

Another proposition upon which Dr. Porcher insists is the following: "In typhoid and other fevers, when and so long as the tongue continues dry, alcoholic stimulants can and must be used repeatedly and freely until it becomes moist. They seem scarcely, if at all, able to do any harm while this condidition exists, and it serves as a rule for their use. This is because the dry tongue indicates want of glandular and secretory action, caused by depression of the nervous centers. The quick pulse is simply owing to the altered state of the blood, to the accumulation of effete materials by regressive metamorphosis of the tissues, and to defective innervation, and stimulants are not contraïndicated. To administer mercury in such cases, or in fevers generally, merely because the tongue appears furred or coated, is worse than unnecessary. This produces or increases gastro-enteric irritation, and prolongs the fever."

The following contains important truths: "It should be accepted as an axiom in practice that in fevers the temperature of the body should not be allowed to remain high; in other words, that a high grade of fever should not be permitted to continue. For, as a result of this high rate of combustion and consequent destructive assimilation, metamorphosis of tissue, uræmic poisoning, coma, and death result; the rapidity and certainty with which it arrives being in direct ratio with the intensity and duration of the fever; the resulting prostration, paleness, etc., also being in direct relation with the fever. The application of cold water to the head and hands and arms, continuously applied at intervals, is so essential as to be regarded as an axiom; and with cooling alkaline diaphoretics and calalytics internally, and the oxygen-bearing bodies, the chlorates, iodides, and carbonates of potash, will arrest ninety-nine out of one hundred uncomplicated cases. Depressing agents, like veratrum viride, may also be used as adjuvants."

On the subject of the coast districts of South Carolina

and Georgia as winter resorts for invalids Dr. Porcher affords very valuable information, and altogether his paper will reward an attentive perusal.

A report of a case of dislocation of the wrist-joint backward, by Prof. Francis L. Parker, makes the second paper in the volume. Prof. Parker subjoins to the history of his case an elaborate review of the cases of dislocation of the wrist-joint on record, which will be interesting to the student of surgery. This report is followed by a case of cæsarian operation, performed by Dr. J. W. Hill, with safety to both mother and child. The operation was rendered necessary by injuries done to the perineum and vagina in a previous confinement. Twelve years before the woman had been delivered after a labor of six days; and, as a result of this protracted suffering, Dr. Hill found the vagina contracted so firmly that it was impossible to introduce his finger, and after incising a cicatricial tissue in the way was still unable to find the os uteri. The natural passage had been effectually destroyed in the first labor.

To this instructive case succeeds one of placenta prævia, by Prof. F. M. Robinson, in connection with which Dr. R. takes occasion to present the views of recent writers on this vexed subject. He dissents from the views of Radford, Hamilton, and Simpson, and agrees with Barnes as to the source of hemorrhage and the proper treatment in such cases.

An exhaustive essay on uræmia, by Prof. J. F. M. Geddings, makes the next paper, in which will be found all the latest views in reference to this very interesting affection. Having presented them all, Prof. Geddings goes on to say: "To my understanding, and from the stand-point of personal observation, it appears that no single hypothesis heretofore suggested is applicable to all cases. I am of the opinion that a careful examination of clinical facts establishes beyond a doubt that we err when we attempt to unite under one head conditions so variable as those constituting this serious complication.

Clinical studies of the symptoms, and careful investigation of post-mortem appearances, enable us to discriminate and establish beyond a doubt that in many cases we have to do with conditions arising independent of any influence exercised by the presence of urinary constituents in the blood. In this connection it must constantly be borne in mind that in not a few cases of death from so-called uræmic poisoning the brain and its membranes are not entirely free from manifest lesions, concerning the origin and effects of which there can be no doubt."

Dr. Geddings is convinced, from the observations of Kirkes, Dickinson, and others, that the coma and convulsions occurring in the course of renal disease, and attributed to uræmia, are in reality often due to easily demonstrable lesions of the brain.

Prof. Geo. E. Trescot contributes the next paper in these Transactions. His subject is the "Study and Value of Therapeutics," in the discussion of which he shows that he has consulted many authorities, and is familiar with all the discordant views pertaining to medicine. He believes that therapeutics, to be successful, must rest upon physiology and pathology, the laboratory, and experiments with drugs—the only methods by which we can hope to extend our knowledge of the action of remedies in disease. The man who, at the bedside of the sick, puts on a grave face and says, "You are very ill, but I will cure you," and the men who say, "In this disease so many will die and so many recover, so I will do nothing," are both, Dr. Trescot thinks, "unfit to practice medicine;" and we quite agree with him.

This exceedingly interesting little volume closes with a short description of large biliary calculi passed per rectum, with notes of the history, by Dr. R. W. Gibbs; and some cases of cataract, extracted by the corneal-flap operation, by Prof. Middleton Michel. Prof. Michel's comments upon V. Graefe's operation will be appreciated by oculists.

The style in which the several articles comprising these Transactions are written contrasts pleasingly with that in which much of our medical literature now comes forth. It is not only correct (bating a few errors, for which the printer is responsible), but graceful and scholarly. A great deal of this is due to the influence of the Medical College of South Carolina, to whose faculty the present volume of Transactions owes so much of its interest. L. P. Y.

Counsel to a Mother. By Pye Henry Chavasse, Fellow of the Royal College of Surgeons of England, Fellow of the Obstetrical Society of London, formerly President of Queen's College Medico-Chirurgical Society, etc. Philadelphia: J. B. Lippincott & Co.

This is a tiny book of a hundred and fifty pages, garrulous, gossipy, and egotistical; reminding one of the pretentious discourse of an ancient monthly nurse; abounding in sentiment, twaddle, and repetitions; containing some interesting information and good advice, though nothing new; and yet weaker and worse books have been made. Ten pages are occupied by a poem, as the author calls it, on childhood. If Mr. Pye Henry Chavasse has any professional friends, they certainly failed in their duty to him and to their fellow-men when they allowed him to publish these three hundred and fifty lines of doggerel rhyme.

Mr. Pye Henry Chavasse is evidently a friend of children, and a harmless, well-meaning, benevolent gentleman; and though his friends assuredly ought to put him in a private lunatic asylum rather than ever permit him to inflict another book upon the world, still young mothers, and very young doctors, with an abundance of idle time hanging heavily on their hands, might possibly spend an hour or two profitably in skimming over the pages of his book.

The work is divided into three parts: I. Infancy; II. Childhood; III. Youth. Under these headings every possible topic connected with the subject—mental, moral, and physical—is discussed, barring burial. The model wet-nurse is thus minutely pictured: "The best wet-nurse is a young, healthy, tidy, and clean servant; one who has, under the promise of marriage, been seduced by her lover. It will not only be necessary that she have the above qualifications, but others in addition; namely, a good breast of milk, a well-formed nipple, neither too large nor too small, that her age be between twenty and thirty, and if from the country so much the better." This might suggest a new branch of philanthropy to enterprising young gentlemen of a benevolent turn—namely, manufacturing such wet-nurses for improperly-nourished infants!

In the absence of mother's milk and the model wet-nurse he commends: "New milk, the produce of ONE *healthy* cow; warm water, of each equal parts; table-salt, a few grains; lump-sugar, a sufficient quantity to slightly sweeten it." Fresh air, outdoor exercise, bathing, clothing, abundant food, fruit, pictures, toys, amusements of all sorts, are judiciously insisted upon. Sleep-cordials, hard study, and close confinement in school, along with corporal punishment both by pedagogue and parent, are bitterly denounced. Says Mr. Pye Henry Chavasse: "Whipping a child makes him sly and deceitful; whipping a child hardens his heart, blunts his susceptibilities; whipping a child makes him a sneak and a coward; whipping a child whips bad ways into him. It is a cruel, cowardly, brutal proceeding to whip a defenseless child." Now, upon this last subject, we hold that Solomon's advice, at least in a modified form, is certainly better for American children than that of Mr. Chavasse. There may be some climatic influence which renders flogging so terrible an evil in the case of the British young; but in this country occasional judicious castigation of our offspring is absolutely

necessary alike for the welfare of the child, the comfort of the parent, and the safety of the nation.

The author's horror of horrors is a "draughty room," "a draughty passage," or anything "draughty;" and his pet abomination is a perambulator. That football and cricket must not be neglected for Greek and Latin, and that in selecting a boarding-school for a child it is more important to acquaint yourself with the bill of fare than with the syllabus of lessons, are the two best ideas in the book.

L. P. Y., JR.

Transactions of the Medical Association of the State of Alabama. Mobile: 1871. 356 pages.

This is a volume of which the profession of Alabama may well be proud. It embraces a great range of topics, which are handled by the several writers with signal ability, and is not only elaborate and learned, but practical in its character. The topography and diseases of many of the counties of the state form the subjects of various reports, and with these we have addresses and discussions on points of universal interest to the profession. Medical education comes in among the rest for its share of attention, and the fees of the medical colleges elicited a debate which is given at much length, but not too fully for the taste of most readers, for the question is an absorbing one at this time, and it is well to have it thoroughly discussed. The more the matter is looked into the better, in our opinion, will physicians be satisfied that it is one which may safely be left with the medical colleges themselves, and that the profession is in no danger from a cheap medical education. Its ranks, we are convinced, will not become more crowded because lecture fees are low, any more than the bar is overrun because an education in law costs almost nothing. Time will prove, if we are not greatly

mistaken, that it is the demand for medical talent and learning, and not the cost of a medical education, that determines the number of students of medicine. And as to that deteriorating influence said to be everywhere at work in the profession of our country, resulting from the prevailing systems of medical education, the volume before us testifies to anything rather than deterioration in the present generation of physicians. We believe with Galileo, on the contrary, that the world moves, and that our profession is going forward with it.

At the same time there is room for improvement, and we are free to admit that much of the advancement of the profession, which the most cynical must concede, is due to the discussion that has been going on among us for many years on the subject of medical education. This discussion is continued with great ability in the volume before us, Dr. Weatherly, Dr. Anderson, Dr. Ketchum, Dr. Seelye, and Dr. Cochran taking part in it. Dr. Cochran's eloquent address closes with the following suggestive remarks: "Not that I would not like to be paid for teaching. I would like it exceedingly well; but, under the circumstances, that is simply impossible, and so—not that I love Cæsar less, but that I love Rome more—I make a virtue of necessity, and accept the situation. And I do this, sir, with all the better grace because I know that the sun shines on the other side of the cloud, and that in some way future good will be brought out of this present evil. There is at least one good thing that will grow out of this cut-throat competition between the colleges, and that is this: it will prevent their rapid multiplication and reduce their numbers. Only those that have some real strength will survive the ordeal, and emerge from the conflict chanting hymns of triumph."

The address of the retiring president, Dr. F. A. Ross, is in every respect admirable, full of excellent thoughts, presented in clear, forcible, scholarly language. Dr. Ross

recommends as a practical measure the adoption by physicians of what is styled the "cash system," and in reference to life insurance he makes the following suggestions: "Can not some plan be adopted by which the families of medical men can be provided for? Do we not owe it to our brethren to make the attempt? I take it for granted that the state owes a great deal to its physicians. Why have we assembled here now? Why do our medical societies meet weekly and monthly? It is for the *public good.* All that contributes to the public good inures to the benefit of the state. The state has *never* sufficiently appreciated nor recognized the benefits conferred upon her by the medical profession. Why should we be expected to bestow a very large portion of our time in *charity* to the state, to be *thanked by a direct tax for this privilege?* I think that this professional tax should be turned over by the government to this association, for the purpose, year by year, of insuring the lives of those in the profession who wish to avail themselves of the opportunity."

The annual oration, by Dr. Wm. H. Anderson, is an eloquent review of medicine as extant in our times, embracing a notice of Darwinism, photography, and the microscope, and containing a seasonable caution against the tendency to materialism which the learned author has remarked in the teachings of some of the leading authors of the day. Dr. Anderson has watched the current of medical affairs for the larger part of a life-time, and speaks consequently from matured observation and with the seriousness natural to one of his experience. His oration will not fail to impress the reader of these Transactions.

Next follow the reports on the diseases and surgery of the different counties in Alabama, from which, if we had the space at our command, we could readily compile a long article of valuable observations; but we shall be obliged to pass most of these by without further notice. One fact, adverted to by more than one writer, is noteworthy; that is, the increased

prevalence of malarial diseases in the southern states since the war. Drainage has been neglected, and altogether the system of farming has been less efficient in late years; and to this cause unquestionably the unfavorable change is to be attributed.

Among these reports there is one for which we must make room for something more than a passing notice. It is that by Dr. T. C. Osborn, the president elect of the Association, and long known to the profession as one of the most observant physicians in Alabama. He treats in his paper very thoroughly of the topography, meteorology, and diseases of Hale County. The population of this county is twenty-two thousand, of which fifteen thousand are blacks. The mortality of the county in 1870 was one hundred and seventy-five, of which one hundred and thirty-five deaths were due, in a greater or less degree, to malarial influences. From an experience of thirty-three years, Dr. Osborn is convinced that "nine tenths of all the deaths in the cotton zone" are caused by malaria, and that "but for this subtle agent Alabama would be the healthiest part of the habitable globe." He looks forward, not without reason, to the time when this wide-spread poison will be extinguished. We can not now stop, if we had the inclination, to enter with him into a discussion of the *modus operandi* of malaria upon the human system, but to the many readers who have a taste for such speculations we can recommend the paper of Dr. Osborn as presenting a scientific and plausible theory on the subject.

But we must close our imperfect notice of these Transactions. In taking leave of them we again express our admiration for the zeal and industry of the body of physicians from which they emanate. In the hands of such men as contributed these papers no fears need be entertained for the future of the profession. With so many cultivated minds earnestly devoted to its improvement, it can not fail to make steady progress, and its respectability is assured. Looking

back to the day, less than fifty years ago, when there was not in all the Valley of the Mississippi a single medical association, and we were without a medical journal or a medical literature, it is with a feeling of triumph that we regard such volumes as this issuing from so many societies around us, and behold in every direction such indubitable signs of progress.

This, we trust, will prove to be no spasmodic effort of the profession of Alabama. Let us hope that the future meetings of its Association will show no abatement in the zeal of its members, but that each will be productive of fruits as honorable to it as those which it now sends forth to the world; but if its friends would have it so they must attend its meetings, and must work in the interim. We are sorry to say that even in our experience we have seen more than one state medical society, after a vigorous beginning, fall into a swift decay, and soon lose all its interest and vitality; only a handful of members assembling from year to year, to issue what is little better than an apology for a volume of transactions, or nothing at all. We shall observe with no ordinary interest the future operations of this society.

Clinic of the Month.

SPECIAL REMEDIES FOR TETANUS.—The *Pabellon Médico*, of July 21st, says that according to Dr. Sandell, of Madrid, the cure of traumatic tetanus is sometimes effected when it does not supervene until some nine days after the accident, or when the symptoms last five days. Chloroform is the remedy that up to this time has made the most cures of this affection. If any medicine cured a case which came on soon after the accident took place, it would claim to rank as a remedy; but as yet this has not been discovered. (The Doctor.)

[In an article on tetanus by the senior editor of this journal, and published in the number for September, 1870, the following language occurs: "Traumatic tetanus usually supervenes between four and nine days after the injury, and these cases represent the largest mortality. Recoveries from traumatic tetanus have been usually in cases in which the disease occurs subsequently to nine days after the injury. When the symptoms last fourteen days, recovery is the rule and death the exception, *apparently independent of the treatment.* Chloroform up to this time has yielded the largest percentage of cures in acute tetanus. The true test of a remedy for tetanus is its influence on the history of the disease. *(a)* Does it cure cases in which the disease has set in previous to the ninth day? *(b)* Does it fail in cases whose duration exceeds fourteen days? No agent tried by these tests has yet established its claims as a true remedy for tetanus."—EDS. AM. PRAC.]

THE USES OF THE UVULA.—In a paper on this subject, read at the late meeting of the British Association, held at

Edinburgh, by Sir Duncan Gibb, he summed up the uses of the uvula as follows: "1. It acts as a sentinel to the fauces in exciting the act of deglutition when anything has to be swallowed. 2. It compresses the soft palate, and holds its posterior free border firmly against the wall of the pharynx in deglutition, so that nothing can pass upward. 3. It modifies speech in the production of loud declamation, and the gutteral forms of language, by lessening the pharyngo-nasal passage when it acts as an elevator. 4. Its elevating power is increased to the most extreme degree in the highest ranges of the singing voice, and is very moderately exerted in the lower ranges. 5. Therefore, in its uses, deglutition and vocalization are the functions that are intimately associated with the uvula, and both become impaired more or less if it is destroyed, wholly removed, or seriously injured." *(Ibid.)*

Sulphate of Iron locally in Phlegmasia Dolens.— For a number of years past Dr. R. W. Crichton has used in that form of phlegmasia dolens commencing at the calf of the leg and extending upward to the groin, where the veins are chiefly involved, a lotion of sulphate of iron, twenty or thirty grains to the ounce of water. It is applied, as hot as the patient can bear it, on spongio-piline. Under its use Dr. C. gets good and rapid recoveries, contrasting favorably with cases treated with leeching and hot fomentations. He gives muriated tincture of iron in large doses at the same time. He suggests the same method of treatment in other cases of phlebitis. *(Ibid.)*

Infantile Diarrhea.— Dr. Stephen MacSwiney, in an article in the Dublin Quarterly Journal on "Diarrhea, with green stools, in Infants," concludes with the following summary: "1. The cause of green stools in children has not yet been established. 2. It may be doubted if the passage of bile is necessary to the production of the color. 3. These stools

are often due to the inherent delicacy in the child. 4. Human milk varies much in its composition, and is occasionally injurious to the infant fed on it. 5. A ready method of testing the quality of breast-milk is still a desideratum by physicians."

HYPODERMIC INJECTION OF MERCURY FOR SYPHILIS.—Dr. Von E. Hansen enumerates the following as some of the advantages in the use of the hypodermic injection of corrosive sublimate in syphilis: 1. In the beginning of the treatment, the very rapid involution of the syphilitic appearances. 2. The non-appearance of the usual mercurial symptoms. 3. That by this treatment the general health of the patient is not altered. 4. The very small quantity of mercury used. 5. That in this treatment it is not necessary to alter the diet and manner of living of the patient. The author injects from one twentieth to one fifth of a grain at a dose; and the severity of the case, and the patient's capability of resisting the action of the medicine, decide whether the injection should be used daily or every three days. The only two objections to this practice are the induration of the skin and the pain which follows the injection; the pain being often very severe, and the induration frequently lasting several weeks. Out of five hundred injections the author has never had an abscess form. (Medical World.)

COMPOSITION OF SOME SECRET MEDICINES.—Dr. Wittstein's "Hand-book of Secret Medicines," recently published, gives the following as the composition of certain famous nostrums: *Hoff's Extract of Malt* has been repeatedly altered in its composition. It is now a good beer, of a pretty constant alcoholic strength of 3 per cent., but varying in amount of extract between 5.3 and 10 per cent. The beer sometimes contains an infusion of a bitter herb (buckbean, blessed thistle) and of the bark of *Rhamnus frangula.* According to one original recipe, beer was mixed with a small quantity

of strong infusion of marshmallow-root, coriander, staranise, and grains of paradise, and with some simple syrup, glycerine, oil of lemon or of orange, and of beer coloring (caramel). The consumers can make it for, at most, one sixth of its price. *Syrup of Horseradish*, by Grimault. Hagar gives the following: 50 parts each of fresh scurvy grass, buckbean, and watercress, 60 of horseradish, 40 of fresh orange-berries, are infused with 3 parts cinnamon in 50 parts white wine, and after a day expressed; 250 parts sugar are dissolved in the filtrate. *New York Pills*, by Sampson, of New York. The one-and-a-half-grain pills consist of powdered cocoa 25, extract of cocoa 30, powdered iron 35 parts. *Brandreth's Pills* contain resin of podophyllum, inspissated juice of poke-berries, saffron, cloves, and oil of peppermint. *Holloway's Pills* are composed of aloes, myrrh, and saffron. *Morrison's Pills*, two and a half grains each, consist of aloes, cream of tarter, and colocynth. Another kind contain the same ingredients besides gamboge. *Radway's Ready Relief*, according to Peckholt, is an ethereal tincture of capsicum, with alcohol and camphor. *Radway's Renovating Resolvent* is a vinous tincture of ginger and cardamom, sweetened with sugar. (Medical Record.)

Chloral.—Dr. J. B. Andrews has some interesting observations on the physiological action and therapeutical use of chloral, in the American Journal of Insanity for July. Dr. A. has used the article extensively in the New York State Lunatic Asylum, and concludes regarding its physiological action: "1. That the effect of chloral is to reduce the number of pulsations. (In experiments from 84 to 54.) 2. That the primary action is to increase the force of the heart's action and arterial tension. 3. That in large doses, within safe limits, the pulsations are not reduced in number proportionately to the size of the dose, but the effect is more prolonged. 4. That the secondary effect is to diminish the force of the heart's action and the arterial tension."

The effect of a dose is felt within three minutes after taking it. In fifteen minutes, sleep is apt to follow. From twenty minutes to an hour the most marked changes in the circulation take place. Giving chloral seems to be but another mode of administering chloroform. The great and practical advantage is in the slowness of its action and its ready control. Those cases in which it fails, after a full dose, to produce the desired effect are supposed to depend upon the acidity of the secretions of the system. The temperature of the body is somewhat reduced while under the influence of chloral in the usual dose, which tends to prove the assertion that the remedy contracts the capillaries, and thus repels the blood from the surface toward the center of the body.

Chloral has been used to the extent of ninety pounds in the New York Asylum, having been prescribed in three hundred and seventy cases. The average length of time of administration has been to the men thirty-nine days, to the women forty-three days. In a case of melancholia, marked by the most distressing delusions and wakefulness, it was given in twenty-grain doses, for two hundred and fifty-seven nights, as a hypnotic, without losing its effect, and with the happy result of securing refreshing sleep. The patient recovered. In this case, as in others, the value of the remedies was tested by occasionally intermitting the dose. Sixty grains were administered during an attack of mania for one hundred and ninety-five nights in succession.

The value of the remedy in insanity is as a hypnotic, and for this purpose it is of eminent efficacy. Patients who would otherwise be out of bed and noisy at night, to their own injury and the disturbance of a ward, are usually quieted and kept in bed, and at last put to sleep, by a dose of chloral timely administered. The sleep usually lasts from four to eight hours. It is natural, and the patient can be easily aroused. The appetite is not affected by the remedy, no constipation ensues, no ill effects are produced upon the brain, and no appetite for

the medicine is created by its use, as often happens with opium; but in some instances it produces nausea and vomiting, and unless largely diluted it is apt to cause a burning sensation in the stomach and fauces. In some cases its action is so prompt as to give alarm to attendants. It is advantageously combined with hyoscyamus and the bromides to prolong its soporific effects. Dangerous symptoms have followed a dose of fifty grains of chloral, but as much as six hundred grains have failed to destroy life. A case is cited in which a comatose condition was induced by twenty grains. A few fatal accidents are ascribed to the remedy, and wisdom suggests caution in its administration.

POST-PARTUM DIETETIC REGIMEN.—Dr. Cairns said in reference to this subject, in a paper which he recently read before the Obstetrical Society of Edinburgh:

"*The diet should be nutritious in point of quality.* For several years past I have been in the custom of asking all my new patients, both in private and dispensary practice, what sort of food the 'doctor' allowed them to eat after their confinement; and the invariable and uniform answer I have received to that question has been as follows: 'Oh, Doctor, just the usual things.' 'And what things, may I ask, are these?' 'Oh, just breadberry and water-gruel.' This forenoon I asked a patient who had just come from the country—where she had been delivered of ten children, and who has now been delivered of her eleventh, still-born, owing to shoulder presentation, age of patient, and length of time allowed to elapse before medical assistance was called in—the very same question, which was followed by the usual answer, with this addition, that she was kept under that treatment for *ten* days during *all* her confinements, whereas in most other cases I have found it limited to the fifth or sixth day. Such treatment, I humbly maintain, is utterly inconsistent with the principles of obstetrical pathology. I wish I had time to

inform the younger members of the society the real meaning of the term 'labor,' because I am certain if they knew what it actually expresses they would at once perceive the necessity, on purely pathological grounds, of *feeding*, and not *starving*, their puerperal patients. I have always been in the custom of liberally administering to my puerperal patients the most nourishing food which their circumstances enable them to procure, such as soft-boiled eggs, beef-tea, soups, chops, steaks, tripe, etc., with a glass of wine daily in addition, or, if the patients prefer it, a glass of ale or porter; and this treatment, I humbly aver, is based on sound pathological principles.

"*The diet should be small in quantity, and frequently repeated.* During labor the digestive and assimilative powers are weakened, as well as other parts of the system, and to exhibit large quantities of food in these circumstances would be to entail upon the stomach a much greater amount of work than it is able to accomplish. Let food be administered in small quantities at a time, and at such intervals as shall have insured the complete digestion of the previous diet.

"*The diet should be varied in kind and form.* Monotony is death, variety life, to the human soul. The eye tires in time of the sublimest spectacles, the ear of the sweetest music, and the tongue of the most delicious morsels. Even in health the richest viands, when continued from day to day, become unpalatable and even nauseous. A change of diet, in short, is indispensable to a proper relish for food and the maintenance of the appetite; and if so in a normal condition of health, how much more on a bed of sickness! In puerperal cases, therefore, common sense seems to suggest that, with the view of stimulating the appetite and imparting to the patient a positive relish for food, every advantage should be taken of the culinary art in dressing the same article in different forms, and when these have been exhausted that one article should be substituted for another during the whole period of the patient's convalescence."

In the discussion which followed, Dr. Cairns stated that he began to give nourishing diet on the day of confinement.

Dr. Keiller said that the dietetic treatment should be regulated in accordance with the habits and circumstances of the patient. He thought that the sloppy treatment was fast going out.

Dr. Bell said that for thirty years he had followed one plan. Immediately after delivery he gave a glass of whisky, brandy, or wine. In one case in which this had not been given he had cause to regret the omission. He agreed in the propriety of keeping up the system, but much must, of course, depend on the habits and constitution of the patient. In most cases he was in the habit of allowing butcher-meat and wine on the third day. He referred to the case of the late Princess Charlotte, who sank from exhaustion consequent upon hemorrhage. She had only water-gruel—no stimulants. In Shetland he understood that a bottle of whisky was given to the patient immediately after delivery, which she was expected to drink in the course of her recovery.

Dr. Sidey said that the state of the tongue, rather than the length of the labor, guided him in his dietetic treatment. The tongue was often dirty, even when the labor was easy. When the tongue is clean, diet of the kind recommended by Dr. Cairns might be safely given, but the same would not do for the other class. (Edinburgh Medical Journal.)

Notes and Queries.

AMAUROSIS DURING MENSTRUATION.—Dr. L. D. Knott, of Bradfordsville, Ky., writes: "An estimable young lady, aged seventeen years, the picture of health, began menstruating at fourteen years. The act was natural in every respect save one: amaurosis set in uniformly on the first day, and continued throughout the second, the period lasting five days. It was accompanied by great dilation and immobility of the pupils, and during its continuance the girl was entirely blind. I thought of giving her calabar-bean extract; but having none on hand, I administered a full dose of morphine. In a short time the pupils contracted, and vision was at once restored. But what is most wonderful, the amaurotic state has not reäppeared, though the patient has passed through eight monthly periods since. Will some one explain?"

A YOUNG MOTHER.—The following is furnished by Dr. John P. Jett, of Lewisport, Ky.: "Hannah Blincoe (colored) gave birth, when she was but twelve years nine months and five days old, to a well-developed girl child. Mothers of so tender an age as Hannah are not often seen in this latitude."

ADVICE WANTED. — A correspondent in Murray, Ky., communicates the following, and asks for advice concerning the nature and management of the case: "A man, aged thirty-two, of scrofulous habit, had, eighteen months ago, a number of boils on different parts of the body. When they disappeared the inguinal glands on the right side became

swollen and excessively hard. Six months after the glands of the left inguinal region became similarly affected. In another six months anasarca of the right leg set in, and has steadily increased, the swelling gradually extending upward on the abdomen, and involving the scrotum. A roundish tumor, intensely hard, about the size of a hen's egg, occupies the inner side of the right thigh just below the inguinal region. The patient has at present rigors or chills every night, occasionally followed by fever and copious sweats." Will some of our readers give the information asked for?

CUNDURANGO.—We published in the January number of the American Practitioner a short account of this, the latest remedy—so called—for cancer. Since then we have received several letters making inquiries concerning it. To one and all we have to answer that, so far as we have been able to learn, cundurango is a complete failure.

THE MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES will, we learn from our friend, the author, Dr. J. M. Toner, of Washington, shortly appear. Besides the names of fifty thousand physicians, it will contain statistics of the medical schools, libraries, hospitals, medical societies and institutions of the country. The work will have an interest to every member of the profession, and ought to yield a handsome reward to its accomplished and indefatigable compiler.

PROF. F. J. BUMSTEAD.—The report which has appeared in some of our exchanges to the effect that Dr. Bumstead contemplated retiring from practice, and removing to Europe, proves to be an error. We learn from the Medical World that Dr. Bumstead has no intention of withdrawing from business, though he does purpose spending the coming winter in Europe. The profession in the United States can not afford to lose Freeman J. Bumstead.

PROF. W. W. DAWSON, M. D., has been appointed in the Medical College of Ohio to the chair made vacant by the death of the lamented Blackman. Dr. Dawson brings to his new office a large experience, pleasing address, and great personal popularity. The alumni of the institution can but be satisfied with the appointment.

PROF. J. W. S. GOULEY, M. D., for many years Demonstrator of Anatomy and Professor of Clinical Surgery in the Medical Department of the University of New York, has resigned from that institution. The Medical World well remarks that the University has lost the services of an exceedingly able teacher of surgery—of one who had few equals in the special departments to which he devoted his talents and energies.

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* Any of these works may be procured by application to Messrs. John P. Morton and Company, Louisville, Kentucky.